

ICoWEFS'2021

10-12 Mai 2021 Politechnic of Leiria, Leiria, Portugal

Conference Agenda

<https://videoconf-colibri.zoom.us/j/81963998270>

All times are Lisbon time

Monday, 10 Mai 2021

Main Room		Room #1 - Agrifood		Room #2 - Energy		Room #3 - Water		Room #4 - Sustainability	
9:30 AM	Opening Ceremony Session chair: João Galvão								
10:15 AM	Keynote #1 - Howard Dryden GOES foundation University of Edinburgh, Scotland UK "All life on Earth depends upon healthy Oceans – Choose your lifeline" Session chair: João Galvão								
11:00 AM	Coffee-break								
11:15 AM	Paralel Sessions -->								
		# Paper#	# Paper#	# Paper#	# Paper#	# Paper#	# Paper#	# Paper#	# Paper#
		1. 40	1. 53	1. 50	1. 50	1. 50	1. 50	1. 50	1. 50
		Effects of COVID-19 on Food Security, Safety and the Supply Chain Haley Fox, Jennyfer Piña, Miranda Reinhart & Ahmad Pourmovahed	Comparative Performance and Efficiency of EURO VI Heavy-Duty engines fueled by Biodiesel, HVO and Diesel Luis Serrano, Nuno Pereira & Paulo Matos de Carvalho	eSmartWatering - A more sustainable solution for irrigation João Ascensão, Rui Alves & Paulo Matos					
		2. 105	2. 30	2. 29	2. 29	2. 29	2. 29	2. 29	2. 29
		Understanding the behavior of the Low-Income Population when purchasing fruits and vegetables. Case study of Cochabamba (Cercado) - Bolivia. Agatha Clarice Da Silva Ovando & Carla Andrea Ocampo Terceros	Study of a mid-scale prototype of biogas in a pig farm using grape waste in anaerobic co-digestion A.I. Parralejo, L. Royano, M.A. Serrano, J. Cabanillas & J. González	Impact of Permeable Pavement on Stormwater Runoff in Urban Areas: A Case Study of Leiria Nahum Santos, Ricardo Gomes & Anabela Veiga					
		3. 61	3. 86	3. 20	3. 20	3. 20	3. 20	3. 20	3. 20
		Gendered video production for livestock farmers in Senegal Eija Laitinen	Enhancement of biogas production from swine wastewater using electrochemical pretreatment and anaerobic co-digestion with rice straw G. Lourinho & P. S. D. Brito	Potential for the Use of Rainwater in Higher Education Institutions: A Case Study of Building D of Campus 2 of the Polytechnic of Leiria Sara Bona & Ricardo Gomes					
		4. 22	4. 128	4. 08	4. 08	4. 08	4. 08	4. 08	4. 08
		How sustainable is the Millennials' diet? Reflections on a qualitative study María Suárez-Gómez & Rosalina Pisco Costa	Effect Of Combined Alkali-Thermal Pretreatment On Methane Potential From BMP Of Date Palm Empty Fruit Bunch Nabila Lahboubi, Ikram Naim, Sanae Habchi, Azzouz Essamri & Hassan El Bari	Real and virtual water in civil construction Silva, M.D.N., Duarte, André Montenegro & Vinagre, M.V.A.					
		5. 83	5. 28	5. 129	5. 129	5. 129	5. 129	5. 129	5. 129
		What do 3rd level students consider a sustainable diet? A qualitative study Diarmuid Loftus & Maria Dermiki	Size screening and washing to improve pellet quality solid biofuel from plum tree pruning biomass Luis Royano Barroso, Ana Parralejo Alcobendas, Manuel Acevedo Serrano, Juan Cabanillas Patilla, Juan Félix González González & Jerónimo González Cortés	A contribution to overcome water management challenges in Brazil Lisiane Ilha Librelotto, Paulo Cesar Machado Ferroli, Flávio Craveiro & Helena Bártolo					
1:00 PM	Lunch break								
2:00 PM	Keynote #2 - Francisco Gírio LNEG-National Laboratory of Energy and Geology, Portugal "Biochemical Biorefineries for Advanced Biofuels" Session chair: Paulo Brito								
2:45 PM	Session for Sponsors / Technical Sessions								

3:30 PM Coffee-break

3:45 PM Paralel Sessions -->

	Room #1 - Agrifood	Room #2 - Energy	Room #3 - Water	Room #4 - Sustainability	
	Session chair: Fernando Lidon	Session chair: Paulo Brito	Session chair: Joaquim Sousa	Session chair: Cristina Andrade	
# Paper#	# Paper#	# Paper#	# Paper#	# Paper#	
1. 125	Integrating the Sustainable Development Goals with the Water-Energy-Food nexus: a model for agro-industrial companies Fernando Caixeta, Pedro Saraiva & Fausto Freire	1. 130	Hydrogen Peroxide Pretreatment of Lignocellulosic Biomass (Pepper Plant and Eggplant) For Anaerobic Digestion K.Hamraoui, H.El Bari,J.A. Siles, A.F. Chica & Angeles Martin Santos	1. 41	Urban development and water supply system: A case study on Comilla City Corporation G.M. Sarwar Badhan, Reetika Ali & Sabkat Kamal
2. 107	Island housing and peri-urban agriculture in the city of Luanda Filomena do Espírito Santo Carvalho, Miguel Amado, Manuel Duarte Pinheiro & António Gameiro	2. 99	Effect of Temperature on The Gasification of Olive Prune Pellets Carla Barros, Eveline Santos, Ana Assis, Carlina Ribeiro, Ligia Gomes, Vitor Matos, Victor Arruda, Roberta Panizio, Luis Calado, Pedro Romano, Luiz Rodrigues & Paulo Brito	2. 87	Building a Digital Twin for the Management of Pressurised Collective Irrigation Systems Madalena Moreira, Sandra Mourato, Carlos Rodrigues, Sandra Silva, Rita Guimarães & Carlos Chibeles
3. 59	Greenhouse gas emissions from subsistence dairy livestock in rural livelihoods in the northern Andes of Ecuador Jhenny Cayambe, Marco Heredia, Luis Valencia, Bolier Torres, Carlos G H Díaz-Ambrona & Theofilos Toulkeridis	3. 72	Factors affecting landowners' decision to invest in photovoltaics on their farmland: The case of landowners in a Greek rural area Evangelia Karasmanaki, Despoina Sfiri & Georgios Tsantopoulos	3. 90	Evaluation of chemical impacts of rice irrigated with urban treated wastewater Isabel Maria Duarte, Ana Rita Cardoso, Helena Marques, Filipe Melo, José Borralho, Paula Amador, Kiril Bahcevandziev, Teresa Vasconcelos, José M. Gonçalves & Mário Pina Barreto
4. 18	Sustainability and Rural Development through the Production of Organic Cocoa in Calceta – Ecuador: Economic Analysis and Assessment of the Implications on the Living Standards of Farmers Marlon Arturo Cedeño Álava, David Giband & Luz Cecilia García Cruzatty	4. 79	Factors and barriers towards investments in photovoltaics among landowners: A case study from Greece Evangelia Karasmanaki, Despoina Sfiri & Georgios Tsantopoulos	4. 47	Exploring the potential of Remote Sensing in irrigation management at district scale. Study on Lis Valley, Portugal Susana Ferreira, Juan M. Sánchez & J.M. Gonçalves
5. 42	Cultivation of Gracilaria gracilis in an aquaculture system at Mondego River (Portugal) estuary adjacent terrain Ana Carolina Inácio, Tiago Morais, João Cotas, Leonel Pereira & Kiril Bahcevandziev	5. 96	Anaerobic Digestion of Cork Boiling Wastewater – Effect of Agitation Vitor de Oliveira Matos, Luis do Carmo-Calado, Victor Arruda Ferraz de Campos, Pedro Romano, Paulo Sérgio Duque de Brito, Luiz Rodrigues & Roberta Mota-Panizio	5. 19	3D printing filaments from kenaf, poplar and agricultural residues M. Acevedo, L. Royano, A.I. Parralejo, J. Cabanillas, J.F. González & J. González
				100	Development of a Pine Tree Thermal Model Used in Forest Fire Environments Eusébio Conceição, João Gomes, Mª Manuela Lúcio, Jorge Raposo, Domingos Xavier & Mª Teresa Viegas
				12	Comparative analysis of soil slope stability, using dynamic and pseudo-static methods on the Garrapata - Santa Maria road, Manabi Province, Ecuador Lucía Macías, Digna Loor, Eduardo Ortiz-Hernández, Gema Casanova, Daniel Delgado1
				55	Implementation of the Eco-Schools Program in Higher Education - a path to environmental sustainability at IPC Álvaro Leal, Hélder Simões, João Figueiredo, António Loureiro, Sílvia Seco & Ana Ferreira

5:00 PM End, for today

Tuesday, 11 Mai 2021

9:30 AM

Main Room
Keynote #3 - Annukka Pakarinen Häme University of Applied Sciences, Finland "Smart Bioeconomy to Enable Sustainability" Session chair: João Galvão

Keynote #4 - Alberto C. Neto
CEO BEWG PT

10:15 AM "The future challenges of water management as a finite resource"
Session chair: João Galvão

11:00 AM Coffee-break

11:15 AM Paralel Sessions -->

	Room #1 - Agrifood Session chair: Teresa Mouga	Room #2 - Energy Session chair: João Sousa	Room #3 - Water	Room #4 - Sustainability Session chair: Henrique Miranda
1.	<p># Paper# 54</p> <p>The challenges of water saving in rice irrigation: field assessment of alternate wetting and drying flooding and drip irrigation techniques in the Lis Valley, Portugal</p> <p>José M. Gonçalves, Manuel Nunes, António Jordão, Susana Ferreira, Rui Eugénio, Javier Bigeriego, Isabel Duarte, Paula Amador, Olga Filipe, Henrique Damásio & Kiril Bahcevandziev</p>	<p># Paper# 70</p> <p>Analysis of specific energy consumption of wastewater treatment plants in the north of Portugal</p> <p>Bruno J. Cardoso, Eugénio Rodrigues, Adélio R. Gaspar & Álvaro Gomes</p>		<p># Paper# 73</p> <p>Indoor Air Quality, Ultrafine Particles in Offices and Services of Coimbra Health School</p> <p>Fernando Moreira, Ana Ferreira, João Paulo Figueiredo & Inês Caseiro</p>
2.	<p># Paper# 76</p> <p>Application of Remote Sensing based tools for improving agricultural management in paddy fields in the Lower Mondego region</p> <p>Romeu G. Jorge, Isabel P. de Lima & João L.M.P. de Lima</p>	<p># Paper# 85</p> <p>Energy-efficient dewatering technique for recycled films</p> <p>Joel C. Vasco, Nelson Silva, Fernando Lagoa, Carlos Capela, Lizete Heleno, Marcelo Gaspar & Nelson Oliveira</p>		<p># Paper# 74</p> <p>Indoor Air Quality, Ultrafine Particles in Laboratories and Classrooms of Coimbra Health School</p> <p>Fernando Moreira, Ana Ferreira, João Paulo Figueiredo & Ruben Ferreira</p>
3.	<p># Paper# 115</p> <p>Risks Perceptions on Rice Production: Baixo Mondego, Portugal</p> <p>Maria de Fátima Oliveira, Sérgio Oliveira, António Russo, Kiril Bahcevandziev, Ana Bela Lopes, José M. Gonçalves, António Dinis Ferreira & Pedro Arnaldo Reis</p>	<p># Paper# 62</p> <p>Performance of thermal break strips in lightweight steel framed walls</p> <p>Telmo Ribeiro, Paulo Santos & Diogo Mateus</p>		<p># Paper# 75</p> <p>Towards The Concept Of A Digital Green Twin For A Sustainable Product Lifecycle</p> <p>Jan Michael, Eva-Maria Grote, Stefan Achilles Pfeifer, Rik Rasor, Christian Henke, Ansgar Trächtler & Lydia Kaiser</p>
4.	<p># Paper# 114</p> <p>Urban Hydroponic Herb and Spice Garden</p> <p>J. J. Monteiro, Z. S. S. Monteiro, C. S. Monteiro, M. S. Monteiro & A. S. Monteiro</p>	<p># Paper# 77</p> <p>Thermal balance analysis in a Light Steel Frame residence with different insulation material thickness</p> <p>Isabel Lourenço, António Lourenço, Rui Eugénio, Telmo Ribeiro, Paulo Santos, António Mateus</p>		<p># Paper# 80</p> <p>Planning for urban sustainability: a complex adaptive system analyses of the Lisbon Green Infrastructure</p> <p>Ticiana Ponte & Margarida Queirós</p>
5.	<p># Paper# 45</p> <p>Sand-dune plants from the Atlantic coast of the Iberian Peninsula: features & applications</p> <p>Tiago Parracho, Daniela C. Vaz, Paula Veríssimo & Vânia Ribeiro</p>	<p># Paper# 94</p> <p>Infrasound and low-frequency noise produced by wind turbines in housings - Case studies</p> <p>João Almeida, Andreia Videira, João Paulo Figueiredo & Ana Ferreira</p>		<p># Paper# 88</p> <p>Time of day and workdays vs. weekend differences in the use of cultural ecosystem services in urban parks (Coimbra, Portugal)</p> <p>Luís Valença Pinto, Carla S.S. Ferreira & Paulo Pereira</p>
6.		<p># Paper# 46</p> <p>Smart Energy in Sustainable Services Building</p> <p>João Galvão, Rita Ascenso, Sofia Pereira, Licínio Moreira & Filipe Neves</p>		

1:00 PM Lunch break

Keynote #5 - Saifur Rahman
Joseph Loring Professor & Director Virginia Tech Advanced Research Institute, USA
"Global Electric Power Sector: Engaging with Environment Issues"
Session chair: João Galvão

2:45 PM Session for Sponsors / Technical Sessions

3:30 PM Coffee-break

#	Paper#	Session chair: Luís Soares	#	Paper#	Session chair: Luís Neves	#	Paper#	Session chair: Nelson Oliveira	#	Paper#	Session chair: Rita Anastácio
1.	37	Comparison of chemical parameters in zinc biofortified flours of Triticum aestivum L.: development of a functional food Inês Carmo Luís, Ana Coelho Marques, Cláudia Campos Pessoa, Diana Daccak, Ana Rita F. Coelho, Fernando C. Lidon, Manuel Patanita, José Dôres, Manuela Simões, Ana Sofia Almeida, Ana Sofia Bagulho, José Moreira, Maria Fernanda Pessoa, Maria Manuela Silva, Fernando Henrique Reboredo, Paulo Legoinha, Paula Scotti Campos, Isabel P. Pais & José C. Ramalho	1.	97	Variation of infrasound and low frequency noise produced by wind turbines, regarding distance and vegetation - Case study João Almeida, Márcia Santos, Roksolana Stefurn, João Paulo Figueiredo & Ana Ferreira	1.	91	Microbiological monitoring of superficial water of Lis Valley Irrigation District. Impacts of agricultural activities Isabel M. Duarte, Helena Marques, Maria Corte-Real Araújo, Paula Amador, Teresa M. Vasconcelos, Susana Ferreira & José M. Gonçalves	1.	88	Soil health in urban protected areas and pathways for sustainable development Snežana Štrbac, Carla S.S. Ferreira, Lucian C. Dinčá, Nevena Antić, Gorica Veselinović, Zahra Kalantari & Milica Kašanin-Grubin
2.	34	Calcium biofortification in Solanum tuberosum L. cv.Agría: A technical workflow Ana Rita F. Coelho, Ana Coelho Marques, Cláudia Campos Pessoa, Inês Carmo Luís, Diana Daccak, Manuela Simões, Fernando Henrique Reboredo, Maria Pessoa, Maria Manuela Silva, Paulo Legoinha, Mauro Guerra, José C. Ramalho, Paula Scotti Campos, Isabel P. Pais & Fernando C. Lidon	2.	60	Sustainable and affordable building technologies in Northern Kenya Zeltia Blanco, Eija Laitinen & Vincent Kitio	2.	82	Monitoring a gravity-flow conveyance system to improve water management. Lis Valley Irrigation District case study Manuel Nunes, Susana Ferreira, Rui Eugénio, Henrique Damásio & José M. Gonçalves	2.	52	Asian wasp as an Environmental Health problem- case of study in the Municipality of Coimbra Susana Paixao, Ana Ferreira, Paulo Figueiredo & Adrina Felizardo
3.	33	Agronomic biofortification in Se of Oryza sativa L.: Food quality control for baby food products Ana Coelho Marques, Cláudia Campos Pessoa, Ana Rita F. Coelho, Diana Daccak, Inês Carmo Luís, Paula Scotti Campos, Manuela Simões, Ana Sofia Almeida, Maria Fernanda Pessoa, Fernando Reboredo, Mauro Guerra, Roberta G. Leitão, Carlos Galhano, José C. Ramalho, Paula Marques, Ana Bagulho, José Moreira, Maria Manuela Silva, Paulo Legoinha, Isabel Pais & Fernando C. Lidon	3.	27	The challenge of turning Galicia into an interconnected distributed electrical grid using CLEW tools Antía Míguez Fariña & Ángeles López Agüera	3.	55	The application of Multiple Correspondence Analysis method to irrigation water quality in Tejo alluvial river plain Ferreira, D., Simões, M., Reboredo, F., Pessoa, F., Almeida, A., Carvalho, M.R., Coelho, A., Pessoa, C., Marques, A., Luís, I., Daccak, D., Mendes, M.P. & Lidon, F.	3.	23	Urban Mobility Characterization and its application in a Mobility Plan. Case study: Bahia de Caráquez – Ecuador Daniel Alfredo Delgado Gutiérrez, Luis Santiago Quiroz Fernández, Gema Jahaira Casanova Ruiz, Marlon Arturo Cedeño Álava & João Pedro Cruz da Silva
4.	36	Agronomic biofortification with Fe and Zn in organic tomatoes (Lycopersicon esculentum L.) Ana Rita F. Coelho, Cláudia Campos Pessoa, Ana Coelho Marques, Inês Carmo Luís, Diana Daccak, Manuela Simões, Fernando Henrique Reboredo, Maria Pessoa, Maria Manuela Silva, Paulo Legoinha, Carlos Galhano, José C. Ramalho, Paula Scotti Campos, Isabel P. Pais & Fernando C. Lidon	4.	93	Case Studies of Latent Heat Storage with Phase-Change Materials in the Agroindustry Value Chain Carla Silva, Carlos Simão, João Murta-Pina, Fernando Reboredo, Henrique Paula & Alfredo Martins	4.	71	Big data in Smart Cities – water demand prototypes using clustering techniques Pedro Miguel, José Gonçalves & Luís Neves	4.	43	Sustainable logistics and Operations design: Sustainable practices for emerging countries - perspective of the situation in Bolivia Aghata Clarice Da Silva Ovando & Jocabed Becerra Soliz
5.	38	Influence of Zinc fertilization for physical and chemical parameters and sensory properties of grapes Diana Daccak, Cláudia Campos Pessoa, Ana Rita F. Coelho, Inês Carmo Luís, Ana Coelho Marques, Manuela Simões, Fernando Reboredo, Maria Fernanda Pessoa, Maria Manuela Silva, Carlos Galhano, Paula Scotti Campos, Isabel Pais, Nuno Alvarenga, Elsa Gonçalves, José C. Ramalho & Fernando C. Lidon	5.	101	Energy, Thermal Comfort and Air Quality in a Ventilation System Based on Confluent Jets Eusébio Conceição, M ^a Inês Conceição, M ^a Manuela Lúcio, João Gomes, André Ramos & Hazim Awbi	5.	31	Long Term water-energy-climate change analysis for Algeria Hamiche Ait Mimoune, Amine Boudghene Stambouli, Samir Flazi and Hideomi Koinuma	5.	49	Sustainable Development and Reverse Logistics Ricardo Martins, Noelle Camello & Carlos Soares
									6.	11	Portuguese landscapes: intensive monocultures and sustainability problems

5:00 PM End, for today

Wednesday, 12 Mai 2021

Main Room		Room #1 - Agrifood	Room #2 - Energy	Room #3 - Water	Room #4 - Sustainability
Keynote #6 - Ana L. Pires MARE / FCT NOVA University of Lisbon, Portugal		Session chair: Cátia Pontes		Session chair: Alfeu Sá Marques	Session chair: Helena Bártoło
9:30 AM	"Eco-design and sustainable packaging: challenges, trends and perspectives in the food sector" Session chair: João Galvão				
10:15 AM	Coffee-break				
10:30 AM	Paralel Sessions -->				
		<p># Paper#</p> <p>1. 10 A technological workflow for Ca enrichment in Rocha pears: Implication in quality Cláudia Campos Pessoa, Ana Rita F. Coelho, Inês Carmo Luís, Ana Coelho Marques, Diana Daccak, Manuela Simões, Fernando Reboredo, Maria Manuela Silva, Maria Fernanda Pessoa, Carlos Galhano, Paula Scotti Campos, Isabel Pais, José C. Ramalho & Fernando C. Lidon</p> <p>2. 122 A deep learning-based fruit quality assessment system Harini S., Parijat Deshpande, Jayita Dutta & Beena Rai</p> <p>3. 44 Storage procedures influence the antioxidant capacity of bee pollen Telma Orvalho, Daniela C. Vaz, Vânia Ribeiro & Maria Jorge Campos</p> <p>4. 43 Antioxidant capacity evaluation of porphyrin extracted from Porphyra dioica: incorporation in films for food packaging Margarita Reyes, Pedro Azañón, María Bernabéu, Cátia Afonso & Susana Bernardino</p>		<p># Paper#</p> <p>1. 124 Comparison of reconstruction methods for water supply systems flow rate time series Carlos Ascensão, Bruno Ferreira, Raquel Barreira & Nelson Carriço</p> <p>2. 13 Sustainable Water Package: Technical Analysis versus Consumer Perception Henrique Almeida, Liliana Vitorino & Raquel Antunes</p> <p>3. 72 Water use and its perception in the hotel industry in the Iberian Peninsula Elena Terradillos & Aldina Soares</p> <p>4. 10 Evaluation of the sediment rate of the water reservoir of a hydroelectric plant using the 210Pb dating technique: Case study of the Vigário reservoir, Pirajá, RJ/Brazil C.D. Vieira, J.M. Souza, M.N. Flor, L.C. Vianna, C.A.C. Santos & D.F.C. Oliveira</p> <p>5. 12 Interrelations between soil erosion conditioning factors in basins of Ecuador: Contributions to the spatial model construction Daniel Delgado, Mahrez Sadaoui, Henry Pacheco, Williams Méndez & Wolfgang Ludwig</p>	<p># Paper#</p> <p>1. 20 An Overview of Green Roofs in Urban Areas: Impact on Buildings and Food-Energy-Water Nexus Ricardo Gomes, João Galvão, Pedro Gala, Luís Prola & Vânia Ribeiro</p> <p>2. 109 How Smart is Green? Sustainable and Intelligent Mobility Solutions for Transporting People and Goods Filipe Ferreira, Miguel Ribeiro, Luís Serrano, Marcelo Gaspar & Jorge Julião</p> <p>3. 39 Climate governance and sustainable development: a sight to the intermediate and border cities of Ecuador Vanessa Karina Duque-Rengel, Marco Heredia, Ketty Daniela Calva-Cabrera, Bolier Torres & Theofilos Toulkeridis</p> <p>4. 91 Climate Change and Culicidae Vectors - A systematic review of the evolution on Southern European countries Susana Fátima, Ana Ferreira, Paulo Figueiredo & João Ferreira</p> <p>5. 127 Life Cycle Analysis and Sociocultural Impact for a Sustainable Nexus Design Mahamat Habib Bechir, Mannelli, A. & López Agüera A.2</p>

Keynote #7 - Remco Kranendonk
Wageningen University and Research, The Netherlands

12:15 PM "The conditional framework of regional biobased innovations; insights and experiences from regional HUBS in H2020 BLOOM project"
Session chair: João Galvão

1:00 PM Lunch break

2:00 PM Paralel Sessions -->

Room #1 - Agrifood	
Session chair: Ana Rodrigues	
#	Paper#
1.	65
Sustainable use of seaweeds from S. Martinho do Porto, Portugal – past, present, and future perspective Mário Cavaco, Adriana Duarte, Susana Bernardino, Clélia Afonso & Teresa Mouga	
2.	67
Biochemical composition of six native seaweeds from Buarcos Bay, Central West Coast of Portugal Ana Marta Mendes Gonçalves, Sara García-Poza, João Cotas, João Carlos Marques & Leonel Pereira	
3.	49
Sustainable treatments for wastewater deriving from the coffee processing Subramanian Shanthakumar & Fulvia Chiampo	
4.	106
Integrated treatment of pig production wastewaters using pre-treatment with biomass ash and bioremediation by microalgae Catarina Viegas & Margarida Gonçalves	
5.	14
Current and Future Trends of 3D Food Printing Henrique Almeida, Joel Vasco & Vânia Ribeiro	

Room #2 - Energy

Room #3 - Water	
Session chair: Nuno Simões	
#	Paper#
1.	8
Mobilization towards an integrated research network for studying runoff, sediment transport and climate of the Paraíba do Sul basin M.N. Frota, G.B. França, E.P. Souza, J.M. Godoy, A.A.M. Araujo & L.Q. Viana	
2.	68
Development of a reactor in a continuous system using advanced oxidation processes to reduce chemical oxygen demand in industrial effluent Cassiano Ricardo Brandt, Daniel Kuhn, Ytan Andreine Schweizer, Sabrina Grando Cordeiro, Ani Caroline Weber, Gabriela Vettorello, Bruna Costa, Letícia Hoehne, Elisete Maria de Freitas Eduardo Miranda Ethur & Lucélia Hoehne	
3.	32
The technology of reagent sewage treatment of industrial enterprises Yevgen Zbikovskyy, Oksana Turchanina & Iryna Shvets	
4.	120
Ecotoxicity of plastic in the marine environment - contributions to an environmental impact model Iasmin Godinho, Lizete Heleno & Nelson Oliveira	
5.	51
Water saving challenges in a gravity-flow irrigation district. The action of Lis Valley Water Management Operational Group (EIP-AGRI), Portugal José M. Gonçalves, Manuel Nunes, Susana Ferreira, Rui Eugénio, Henrique Damásio, Margarida Teixeira, Paula Amador, Olga Filipe, Isabel Maria Duarte, Rosinda Pato, Helena Marques, Teresa Vasconcelos & Madalena Gonçalves	

Room #4 - Sustainability	
Session chair: Ana pires	
#	Paper#
1.	56
Researching on Sustainable Urban Qualification Scenarios Pedro Bento & Margarida Louro	
2.	16
Energy-Water-Food Nexus: The Case of the Sahel Region Moses S Bass, Lopez-Agüera, A. & Míguez Farina Antía	
3.	134
Industry 4.0 for Sustainable Production in Footwear Industry Tatjana Spahiu, Henrique Almeida, Athanasios Manavis, Panagiotis Kyrratsis & Antonio Jimeno-Morenilla	
4.	132
Sustainable Materials for Additive Manufacturing: Earth-Based Concrete Yeşim Tarhan, İsmail Hakkı Tarhan, Flávio Craveiro & Helena Bártolo	
5.	133
A review on the application of Palm Oil Fuel Ash in concrete as a cementitious material for construction Arpan Joshi, Flávio Craveiro & Helena Bártolo	

3:45 PM Coffee-break

4:00 PM Closing ceremony